

DRAFT

COMMONWEALTH OF VIRGINIA OPERATING PERMIT

STATIONARY SOURCE PERMIT TO OPERATE

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Coffman Stairs - Plant #1
1000 Industrial Road
Marion, Virginia 24354
Registration No. 10131
County-Plant No. 173-00030

is authorized to operate

a wood products manufacturing facility

located at

1000 Industrial Road in Marion,
Smyth County, Virginia

in accordance with the Conditions of this permit.

Approved on August 24, 1995 (as amended June 10, 1996, August 3, 1999, and _____).

Dallas R. Sizemore
Deputy Regional Director

Permit consists of 12 pages.
Permit Conditions 1 to 34.

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 2

INTRODUCTION

This permit approval is based on the permit application dated April 18, 1995 and March 27, 1996, including amendment sheets dated May 14, 1996; the permit application letter dated March 7, 1999; and the permit application dated November 30, 2006 (including addendum information received December 4, 2007 and January 11, 2007). Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-20 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

1. **Equipment List** - Equipment at this facility consists of the following:

Equipment to be Constructed				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	
DCT #15	Truck Unloading Operation including hopper, auger, enclosure, and dock seal.	5.31 T/hr	----	

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 3

Equipment to be Operated				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	Installation Date
	Industrial Boiler Co. 250 hp wood-fired boiler	11.24 x 10 ⁶ Btu/hr	----	1968
	Bigelow Company HRT 600 hp wood-fired boiler	29 x 10 ⁶ Btu/hr	----	1988
	Two Rosenquist High Frequency Gluing Machines	----	----	
	Four Taylor Glue Reel Machines	----	----	
	Nine Irvington Moore Lumber Dry Kilns	30,000 – 100,000 bd-ft/cycle	----	1975-1980
	Two Secotherm Lumber Dry Kilns	50,000 bd-ft/cycle, each	----	1990
	One Imrie Lumber Predryer	750,000 bd-ft	----	1980
	One SII Lumber Predryer	1,000,000 bd-ft	----	2000
	One Newman S-382 Double-surface Green Lumber Planer	7.1 T/hr	----	1995
	Various woodworking equipment served by 16 dust collection/transfer (DCT) systems:	Various	----	Various
	- DCT #1 (old rough mill)	1.86 T/hr	----	
	- DCT #2 (new rough mill)	1.5 T/hr	----	
	-DCT #3 (chipper)	0.33 T/hr	----	
	- DCT #4 (moulders)	1.86 T/hr	----	
	- DCT #5 (lathes)	1.86 T/hr	----	
	- DCT #6 (lathes)	1.5 T/hr	----	
	- DCT #7 (lathes)	1.86 T/hr	----	
	- DCT #8 (sanding)	1.41 T/hr	----	
	- DCT #9 (fittings)	1.86 T/hr	----	
	- DCT #10 (relay)	6.66 T/hr	----	
	- DCT #11 (relay)	6.66 T/hr	----	
	- DCT #12 (hog)	4.10 T/hr	----	
	- DCT #13 (boiler)	5.31 T/hr	----	
	- DCT #13A (boiler)	1.83 T/hr	----	
	- DCT #14 (truck loading)	5.31 T/hr	----	

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.
(9 VAC 5-80-850)

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 4

2. **Emission Controls** - Particulate emissions from the Industrial 250 hp boiler shall be controlled by an Industrial multicyclone. The boiler and multicyclone shall be provided with adequate access for inspection.
(9 VAC 5-80-10 and 9 VAC 5-80-850)
3. **Emission Controls** - Particulate emissions from the Bigelow 600 hp boiler shall be controlled by a Whirlex Fly Ash Arrestor multicyclone. The boiler shall operate without fly ash reinjection. The boiler and multicyclone shall be provided with adequate access for inspection.
(9 VAC 5-80-10 and 9 VAC 5-80-850)
4. **Emission Controls** - Particulate emissions from the Newman green lumber planer shall be controlled by a Bruning and Federle 28C15 cyclone. The cyclone shall be provided with adequate access for inspection.
(9 VAC 5-80-850 and 9 VAC 5-50-260)
5. **Emission Controls** - All dry woodworking equipment operated at the facility shall be connected to one of the DCT systems listed in Condition #2. Particulate emissions from the DCT systems shall be controlled by the following or equivalent:
 - DCT #1 - Carolina Blower 13' cyclone in series with a Carter- Day 144RJ120 fabric filter (ref. #A);
 - DCT #2 - Carter-Day 144RJ84 fabric filter (ref. #B);
 - DCT #3 - Closed loop system configuration or Carolina Blower 8' cyclone in series with a Donaldson 484 RFW12 fabric filter (ref. #C);
 - DCT #4 - Donaldson 484 RFW12 fabric filter (ref. #C);
 - DCT #5 - Bruning & Federle 44C15 cyclone in series with a Donaldson 232 RFW10 fabric filter (ref. #D)
 - DCT #6 - Bruning & Federle 38C15 cyclone in series with a Carter-Day 144 RJ84 fabric filter (ref. #E);
 - DCT #7 - Bruning & Federle 44C15 cyclone in series with a Carter-Day 144 RJ120 fabric filter (ref. #F);
 - DCT #8-9 - Donaldson 484 RFW12 fabric filter (ref. #G);
 - DCT #10-11 - Closed-loop system configuration;
 - DCT #12 - Carolina Blower 5' cyclone in series with a Carter-Day 144 RJ120 fabric filter (ref. #A);
 - DCT #13- Cyclone and Murphy-Rodgers fabric filter;
 - DCT #13A - Closed-loop system configuration;
 - DCT #14 - Closed-loop system configuration; and
 - *DCT #15 - Partial enclosure and dock seal

The cyclones and fabric filters listed above shall be provided with adequate access for inspection. Each fabric filter listed above, with the exception of the Murphy-Rodgers fabric filter, shall be equipped with a device to continuously measure the differential pressure across each fabric filter. The devices shall be installed in an accessible location and shall be

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 5

maintained by the permittee such that they are in proper working order at all times.
(9 VAC 5-80-850 and *9 VAC 5-50-260)

6. **Emission Controls** - All subsequent transfer of the collected material from the Newman green planer and dry woodworking equipment shall be controlled by a completely enclosed transfer system.
(9 VAC 5-170-160 and 9 VAC 5-80-850)
7. **Fugitive Emission Controls** - Fugitive particulate emissions from the truck loading and unloading operations shall be controlled by proper operation and maintenance of the truck loading and unloading equipment. The permittee shall develop, maintain, and have available to all operators good written operating procedures and a maintenance schedule for the truck loading and unloading equipment. The operating procedures shall include a requirement that the truck loading and unloading equipment be properly sealed before and during operation, at a minimum. The maintenance schedule shall include a requirement for the prompt repair of any leaks in the truck loading equipment, at a minimum. In addition, wood dust spilled/leaked during the operation of the truck loading and unloading stations shall be promptly removed to prevent particulate matter from becoming airborne. All records required by this condition shall be kept on site for the most current five (5) year period and made available for inspection by the DEQ.
(9 VAC 5-80-900 and 9 VAC 5-40-20)
8. **Fuel** - The approved fuel for the Industrial 250 hp and Bigelow 600 hp boilers is wood, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850)
9. **Processing** - The Newman green lumber planer shall process no more than 35,856,000 board feet of green lumber per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-170-160 and 9 VAC 5-80-850)
10. **Processing** - The truck trailer unloading system shall process no more than 500 tons of wood dust per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-1180)
11. **Fuel Throughput** - The Industrial 250 hp boiler shall consume no more than 6,230 tons of wood per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-170-160 and 9 VAC 5-80-850)
12. **Fuel Throughput** - The Bigelow 600 hp boiler shall consume no more than 15,120 tons of wood per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)
13. **Throughput** - Consumption of vinyl acetate-type glues shall not exceed a combined total of 550,000 pounds per year. The vinyl acetate-type glues shall exhibit the following physical

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 6

characteristics:

VOC Content \leq 2.7 wt%

Excess Formaldehyde Content \leq 0.1 wt%

Vinyl acetate-type glues that contain other toxic air pollutants or that do not fit the above profile may not be used without prior approval from the Director, Southwest Regional Office. (9 VAC 5-80-850)

14. **Processing** - The eleven lumber dry kilns shall process no more than a combined total of 67,000 tons of green lumber per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)
15. **Process Emission Limits** - Emissions from the operation of the Newman green lumber planer shall not exceed the limits specified below:

Total Suspended		
Particulate	9.00 lbs/hr	17.93 tons/yr
PM-10	5.40 lbs/hr	10.76 tons/yr

(9 VAC 5-50-260 and 9 VAC 5-80-850)

16. **Process Emission Limits** - Emissions from the operation of the Industrial 250 hp boiler shall not exceed the limitations specified below:

Total Suspended			
Particulate	0.38 lbs/10 ⁶ Btu	4.27 lbs/hr	18.70 tons/yr
PM-10		1.86 lbs/hr	7.68 tons/yr
Sulfur Dioxide		0.11 lbs/hr	0.46 tons/yr
Nitrogen Dioxide		0.50 lbs/hr	2.08 tons/yr
Carbon Monoxide		2.96 lbs/hr	12.24 tons/yr
Volatile Organic			
Compounds		1.04 lbs/hr	4.28 tons/yr

(9 VAC 5-50-260 and 9 VAC 5-80-850)

17. **Process Emission Limits** - Emissions from the operation of the Bigelow 600 hp boiler shall not exceed the limits specified below:

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 7

Total Suspended Particulate	6.69 lbs/hr	26.61 tons/yr
PM-10	6.69 lbs/hr	26.61 tons/yr
Sulfur Dioxide	0.29 lbs/hr	1.13 tons/yr
Nitrogen Dioxide	1.29 lbs/hr	5.14 tons/yr
Carbon Monoxide	7.60 lbs/hr	30.24 tons/yr
Volatile Organic Compounds (9 VAC 5-80-850)	2.66 lbs/hr	10.58 tons/yr

18. **Process Emission Limits** - Emissions from the operation of the lumber dry kilns shall not exceed the limits specified below:

Volatile Organic Compounds (9 VAC 5-80-850)	5.00 lbs/hr	12.00 tons/yr
---------------------------------------------------	-------------	---------------

19. **Process Emission Limits** - Emissions from the operation of the gluing equipment shall not exceed the limits specified below:

Volatile Organic Compounds	3.03 lbs/hr	6.68 tons/yr
Formaldehyde (as VOC) (9 VAC 5-80-850)	0.04 lbs/hr	0.10 tons/yr

20. **Process Emission Limits** - Emissions from the operation of the DCT systems, as exhausted through the following fabric filters, dedicated to the dry woodworking equipment throughout the facility shall not exceed the limits specified below:

	TSP		PM-10	
	lbs/hr	tons/yr	lbs/hr	tons/yr
Carter-Day ref. #A (DCT systems #1, #12)	0.48	2.10	0.48	2.10
Carter-Day ref. #B (DCT system #2)	0.60	2.63	0.60	2.63
	TSP		PM-10	
	lbs/hr	tons/yr	lbs/hr	tons/yr
Donaldson ref. #C (DCT systems #3, #4)	0.77	3.37	0.77	3.37

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 8

Donaldson ref. #D (DCT system #5)	0.15	0.66	0.15	0.66
Carter-Day ref. #E (DCT system #6)	0.12	0.53	0.12	0.53
Carter-Day ref. #F (DCT system #7)	0.15	0.66	0.15	0.66
Donaldson ref. #G (DCT systems #8, #9)	1.31	5.74	1.31	5.74
Murphy Rogers (DCT system #13)	0.42	1.86	0.42	1.86

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 5.
(9 VAC 5-80-850)

21. **Process Emission Limits** - Emissions from the operation of the truck trailer unloading system (DCT#15) shall not exceed the limits specified below:

PM-10	0.64 lbs/hr	0.03 tons/yr
-------	-------------	--------------

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 5 and 10.
(9 VAC 5-80-1180)

22. **Process Emission Limits** - Particulate emissions from the operation of each DCT system controlled by fabric filters shall not exceed 0.05 grains per standard cubic foot of exhaust gas.
(9 VAC 5-80-850 and 9 VAC 5-40-2270)
23. **Visible Emission Limit** - Visible emissions from the Bruning and Federle 28C15 cyclone controlling the Newman double surface planer and each of the fabric filters controlling emissions from the DCT systems shall not exceed five (5) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-170-160 and 9 VAC 5-50-20)
24. **Visible Emission Limit** - Visible emissions from any fugitive emission points shall not exceed ten percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-170-160 and 9 VAC 5-50-20)

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 9

25. **Visible Emission Limit** - Visible emissions from the Industrial 250 hp boiler and the Bigelow 600 hp boiler shall not exceed 20 percent opacity per boiler as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity per boiler. This condition applies at all times except during start-up, shutdown, or malfunction.
(9 VAC 5-40-20 and 9 VAC 5-50-80)
26. **Operator and Training Procedures** - Emissions shall be controlled by proper operation and maintenance of combustion equipment and air pollution control equipment. The permittee shall develop, maintain, and have available to all operators good written operating procedures and a maintenance schedule for the Industrial 250 hp and Bigelow 600 hp boilers and air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site for the most current five (5) year period and made available for inspection by the DEQ.
(9 VAC 5-80-900 and 9 VAC 5-40-20)

RECORDS

27. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
 - a. The monthly and annual throughput of wood through the Industrial 250 hp boiler and the Bigelow 600 hp boiler. Annual throughput shall be calculated as the sum of each consecutive 12 month period.
 - b. The monthly and yearly throughput of green lumber through the Newman green lumber planer. Annual throughput shall be calculated as the sum of each consecutive 12 month period.
 - c. The monthly and yearly throughput of green lumber through the lumber dry kiln operation. Annual throughput shall be calculated as the sum of each consecutive 12 month period.
 - d. The monthly and yearly throughput of each glue consumed by the wood gluing operation. Annual throughput shall be calculated as the sum of each consecutive 12 month period.
 - e. The monthly and annual throughput of wood dust through the truck trailer unloading system. Annual throughput shall be calculated as the sum of each consecutive 12 month

DRAFT

period.

- f. The monthly and annual hours of operation of the DCT systems. Annual throughput shall be calculated as the sum of each consecutive 12 month period.
- g. Scheduled and unscheduled maintenance, and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-1180 and 9 VAC 5-50-50)

GENERAL CONDITIONS

28. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9 VAC 5-170-130 and 9 VAC 5-80-850)

29. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Southwest Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone, or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Southwest Regional Office in writing.

(9 VAC 5-20-180 C and 9 VAC 5-80-850)

30. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ,

reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-20-180 I and 9 VAC 5-80-850)

31. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-50-20 E and 9 VAC 5-80-850)

32. **Permit Suspension/Revocation** - This permit may be revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the terms or conditions of this permit;
- c. Fails to comply with any emission standards applicable to a permitted emissions unit;
- d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;
- e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time that an application for this permit is submitted;

DRAFT

Coffman Stairs
Registration Number: 10131
August 24, 1995 (as amended June 10, 1996,
August 3, 1999, and February , 2007)
Page 12

- f. Fails to comply with the applicable provisions of Articles 6, 8 and 9 of 9 VAC 5 Chapter 80.
(9 VAC 5-80-1010)
- 33. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Southwest Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-940)
- 34. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-860 D)